

### AMENDMENTS TO THE CLAIMS

#### Listing of Claims:

1. (Currently amended) A method for the fermentative production of at least one sulfur-containing fine chemical, which comprises the following steps:
  - a) ~~fermentation of fermenting~~ a coryneform bacteria culture producing the ~~desired at least one~~ sulfur-containing fine chemical, wherein the coryneform bacteria ~~expressing~~ express at least one heterologous nucleotide sequence which codes for a protein with O-acetylhomoserine sulfhydrylase (metY) activity;
  - b) ~~concentration of concentrating~~ the sulfur-containing fine chemical in the medium or in the bacterial cells, and
  - c) ~~isolation of isolating~~ the sulfur-containing fine chemical.
2. (Currently amended) A The method as claimed in claim 1, wherein the sulfur-containing fine chemical comprises L-methionine.
3. (Currently amended) A The method as claimed in claim 1, wherein the heterologous metY-encoding nucleotide sequence is less than 100% homologous to the metY-encoding sequence from Corynebacterium glutamicum ATCC 13032.
4. (Currently amended) A The method as claimed in claim 3, wherein the metY-encoding sequence is derived from any of the following organisms:

|                                    |            |
|------------------------------------|------------|
| Corynebacterium diphtheriae        | ATCC 14779 |
| Mycobacterium tuberculosis CDC1551 | ATCC 25584 |
| Clostridium acetobutylicum         | ATCC 824   |
| Bacillus halodurans                | ATCC21591  |
| Bacillus stearothermophilus        | ATCC 12980 |
| Chlorobium tepidum                 | ATCC 49652 |
| Synechococcus sp.                  | ATCC27104  |
| Emericella nidulans                | ATCC 36104 |
| Bacteroides fragilis               | ATCC 25285 |
| Lactococcus lactis                 | ATCC 7962  |

|                                  |            |
|----------------------------------|------------|
| <i>Bordetella bronchiseptica</i> | ATCC 19395 |
| <i>Pseudomonas aeruginosa</i>    | ATCC 17933 |
| <i>Nitrosomonas europaea</i>     | ATCC 19718 |
| <i>Sinorhizobium meliloti</i>    | ATCC 4399  |
| <i>Thermotoga maritima</i>       | ATCC 43589 |
| <i>Streptococcus mutans</i>      | ATCC 25175 |
| <i>Burkholderia cepacia</i>      | ATCC 25416 |
| <i>Deinococcus radiodurans</i>   | ATCC 13939 |
| <i>Rhodobacter capsulatus</i>    | ATCC 11166 |
| <i>Pasteurella multocida</i>     | ATCC 6530  |
| <i>Clostridium difficile</i>     | ATCC 9689  |
| <i>Campylobacter jejuni</i>      | ATCC 33560 |
| <i>Streptococcus pneumoniae</i>  | ATCC 6308  |
| <i>Saccharomyces cerevisiae</i>  | ATCC 2704  |
| <i>Kluyveromyces lactis</i>      | ATCC 8585  |
| <i>Candida albicans</i>          | ATCC 10231 |
| <i>Schizosaccharomyces pombe</i> | ATCC 24969 |

5. (Currently amended) A The method as claimed in claim 1, wherein the metY-encoding sequence comprises a coding sequence according to SEQ ID NO:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51 and 53 or a nucleotide sequence homologous thereto which codes for a protein with metY activity.

6. (Currently amended) A The method as claimed in claim 1, wherein the metY-encoding sequence codes for a protein with metY activity, said protein comprising an amino acid sequence according to SEQ ID NO:2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52 and 54 or an amino acid sequence homologous thereto which represents a protein with metY activity.

7. (Currently amended) A The method as claimed in claim 1, wherein the coding metY sequence is a DNA or RNA which can be replicated in coryneform bacteria or is stably integrated into the chromosome.

8. (Currently amended) A The method as claimed in claim 7, wherein the bacteria is
- a) a bacteria strain transformed with a plasmid vector carrying at least one copy of the coding metY sequence under the control of regulatory sequences is used, or
  - b) a strain in which the coding metY sequence has been integrated into the bacteria chromosome is used.
9. (Currently amended) A The method as claimed in claim 1, wherein the coding metY sequence is overexpressed.
10. (Currently amended) A The method as claimed in claim 1, wherein the bacteria are fermented in which additionally at least one further gene of the biosynthetic pathway of the ~~desired~~ sulfur-containing fine chemical has been amplified or mutated such that its activity is not influenced by metabolic metabolites.
11. (Currently amended) A The method as claimed in claim 1, wherein the bacteria are fermented in which at least one metabolic pathway, which reduces the production of the ~~desired~~ sulfur-containing fine chemical, is at least partially switched off.
12. (Currently amended) A The method as claimed in claim 1, wherein the coryneform bacteria are fermented in which, at the same time, at least one of the genes selected from among
- a) the gene lysC, which encodes an aspartate kinase,
  - b) the glyceraldehyde-3-phosphate dehydrogenase-encoding gene gap,
  - c) the 3-phosphoglycerate kinase-encoding gene pgk,
  - d) the pyruvate carboxylase-encoding gene pyc,
  - e) the triose phosphate isomerase-encoding gene tpi,
  - f) the homoserine O-acetyltransferase-encoding gene metA,
  - g) the cystathionine gamma-synthase-encoding gene metB,
  - h) the cystathionine gamma-lyase-encoding gene metC,
  - i) serine hydroxymethyltransferase-encoding gene glyA,
  - j) the methylene tetrahydrofolate reductase-encoding gene metF,

- k) the vitamin B12-dependent methionine synthase-encoding gene *metH*,
- l) the phosphoserine aminotransferase-encoding gene *serC*,
- m) the phosphoserine phosphatase-encoding gene *serB*,
- n) the serine acetyltransferase-encoding gene *cysE*, and
- o) the gene *hom*, which encodes a homoserine dehydrogenase,

is overexpressed or mutated in such a way that the activity of the corresponding proteins is influenced by metabolic metabolites to a smaller extent, if at all, compared to nonmutated proteins.

13. (Currently amended) A The method as claimed in claim 1, wherein the coryneform bacteria are fermented in which, at the same time, at least one of the genes selected from among

- a) the homoserine kinase-encoding gene *thrB*,
- b) the threonine dehydratase-encoding gene *ilvA*,
- c) the threonine synthase-encoding gene *thrC*,
- d) the meso-diaminopimelate D-dehydrogenase-encoding gene *ddh*,
- e) the phosphoenolpyruvate carboxykinase-encoding gene *pck*,
- f) the glucose-6-phosphate 6-isomerase-encoding gene *pgi*,
- g) the pyruvate oxidase-encoding gene *poxB*,
- h) the dihydrodipicolinate synthase-encoding gene *dapA*,
- i) the dihydrodipicolinate reductase-encoding gene *dapB*; and
- j) the diaminopicolinate decarboxylase-encoding gene,

is attenuated by changing the rate of expression or by introducing a specific mutation.

14. (Currently amended) A The method as claimed in claim 1, wherein a microorganism[[s]] of the species *Corynebacterium glutamicum* ~~are~~ is used.

15. (Currently amended) A method for producing an L-methionine-containing animal feed additive from fermentation broths, which comprises the following steps:

- a) culturing and ~~fermentation of~~ fermenting an L-methionine-producing microorganism in a fermentation medium;
- b) ~~removal of~~ removing water from the L-methionine-containing fermentation broth;
- c) ~~removal of~~ removing from 0 to 100% by weight of the biomass formed during fermentation; and
- d) drying of the fermentation broth obtained according to b) and/or c), in order to obtain the animal feed additive in the desired powder or granule form.

16. (Currently amended) A ~~The~~ method as claimed in claim 15, wherein the microorganism[[s]] ~~are~~ is coryneform bacteria expressing at least one nucleotide sequence which codes for a protein with metY activity.